STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

Implementation of Restructuring Legislation (Chapter 854, Statutes of 1996, AB 1890): Renewables	)))	Docket No. 96-REN-1890

Comments on the CEC Staff's Draft "Policy Report on AB 1890 Renewables Funding" dated January 3, 1997

Respectfully Submitted by

California Photovoltaics for Utilities Collaborative (CAL PV4U)
California Solar Energy Industries Association (CAL SEIA)
Solar Energy Industries Association (SEIA)
Sacramento Municipal Utility District (SMUD)

To
Renewables Program Committee

January 16, 1997

Howard Wenger
California Photovoltaics
for Utilities Collaborative
32 Valla Court
Walnut Creek, CA 94596
(510) 937-1750

Les Nelson
California Solar Energy
Industries Association
23120 Alicia Parkway, Suite 107
Mission Viejo, CA 92692
714-586-2470

INTRODUCTION

We respectfully submit comments on the California Energy Commission's staff draft "Policy Report on AB 1890 Renewables Funding" dated January 3, 1997. Our comments reflect a consensus agreement by members of the California PhotoVoltaics for Utilities Collaborative (CAL PV4U), the California Solar Energy Industries Association (CAL SEIA), the Solar Energy Industries Association (SEIA), and the Sacramento Municipal Utility District (SMUD).

We focus our comments on the staff's allocation of renewables funding for emerging technologies and most specifically for photovoltaic technology. Comments on broader funding allocation amounts and mechanisms beyond emerging technologies is covered under a separate set of comments submitted by CAL SEIA and SEIA to which we subscribe and support.

COMMENTS

It is self-evident that Staff seriously considered the proposals and testimony submitted by the various participants in the public hearing process during the preparation of their report. We believe that Staff has attempted to deliver a meaningful and well-balanced approach to allocating AB 1890 renewables funds. Given the time constraints, the Staff has done a good job meeting this objective and we agree on many of the elements presented. We do have serious concerns and comments, however, and these are conveyed in the form of 5 points below (please refer to our 20 page proposal for supplementary information and rationale[1]).

1. **Increase Staff's proposed 20% ($108 M) emerging technology allocation to 25% ($135 M)**. We are pleased that Staff affirms that the advancement of emerging renewable technologies is a major guiding policy objective of AB 1890.[2] We believe, however, that Staff's recommended 20% allocation to carry out this policy objective is inadequate and its proposal that the remaining 80% should go to the state's already well-established suppliers of renewable energy is disproportionate and inequitable. These suppliers have previously been the beneficiaries of over 10 years of above-market ratepayer subsidies and aggressive state and federal tax subsidies, and many continue to operate under fixed contracts with other tax and production incentives. We therefore reiterate and strongly believe that our original proposal which allocates 25% of the AB 1890 funds to emerging technologies to be reasonable and fair. As we have previously demonstrated, these emerging technologies represent the future of instate renewable resource development and supply.[3]

[1] Our coalition submitted a proposal to the CEC Renewables Program Committee entitled "Transition to Sustainable Markets: A Consensus Proposal to Allocate AB 1890 Funds for Emerging Renewable Photovoltaic Technology" on November 26, 1996.
[2] See pages ES-1 and 4 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997
[3] Please refer to the "Proposal by SEIA and CAL SEIA for AB 1890 Funding Allocations and Programs", November 26, 1996, for supplementary information and rationale

2. **<u>Eliminate the 60% funding cap and make a specific allocation of $96 million for photovoltaics</u>.** Staff states that "*Photovoltaics are specifically identified in AB 1890 and will receive a specified, but as yet undetermined, allocation of funds from the emerging account, up to a proposed limit of 60 percent of the emerging funds*".[4] We agree with Staff that a specific allocation for photovoltaic technology be made, and we request that Staff propose a specific allocation as soon as possible.

   We do not agree, however, with Staff's proposed maximum funding amount of $65 million. Discussions with and analysis by industry representatives and financial consultants indicate that this level of funding significantly reduces the potential to successfully transition PV to sustainable markets beyond the AB 1890 funding period. The PV proposal should be fully funded at $96 million because it will:

   - Provide the best AB 1890 opportunity *to create a new and sustainable* renewable energy industry serving California electricity markets
   - Create over 60 MW of new annual manufacturing capacity in the state, resulting in new factories, factory expansion, and over 1,000 jobs
   - Accelerate the commercialization of grid-connected PV by at least 8 years
   - Provide the best AB 1890 opportunity for consumers to *directly* enjoy the benefits of renewable energy with over 20,000 individual customer systems
   - Yield an 8 to 1 return on investment to the state and its citizens in the form of sales and property tax revenue, jobs, and manufacturing investment
   - Capture distributed generation benefits that are not available to central station renewable technologies
   - Secure and expand California's position as the world leader in PV technology infrastructure

   Further, we believe the Staff-proposed funding cap of 60% for any one emerging technology should be eliminated. Staff has proposed no such cap elsewhere in its proposal, and AB 1890 does not suggest any such restriction. Rather, each emerging technology should be evaluated on its own merits based on the adequacy of its commercialization plan proposal and on its compliance with the eligibility criteria proposed by Staff on November 20, 1996.[5]

3. **<u>The Greenback rebate program AND the below market interest rate loan program are needed to achieve the cost targets outlined in the PV proposal</u>**. The CEC should recognize that the intent of the low cost loan program is to provide not only a financing mechanism for customer-sited PV but also to provide additional buydown of the cost of a PV system beyond that provided by the Greenback rebate program. This is achieved by providing the financing mechanism at a below market interest rate.

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[4] See page ES-5 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997

[5] "Emerging Renewable Technology", dated November 20, 1996, containing definition, procedure for designation and funding, and criteria for designation as an emerging technology.

We agree with CEC staff that the low cost loan program should take advantage of existing private sector loan programs to leverage AB1890 funds, if this makes the best use of AB 1890 funds. As was indicated in the PV coalition proposal, this is one of two options we are exploring. The two options are:

Option 1. An **interest rate buydown program** which would take advantage of existing private sector loan programs as the CEC Staff Draft Report suggests. *A total of $39 million of AB 1890 funds would be required for such an interest rate buydown program*, calculated as follows. One of the most attractive loan programs that could be used is the FHA Title I loan program offered by HUD through a variety of private sector banks in California. Title I loans are for home improvements and have terms of up to 20 years at interest rates of 11-12%. While they are secured by the customer's home, they do not require equity in the home. The cost of buying down the interest rate from 11% to 5% (the target indicated in the PV proposal) is $39 million, assuming 50% of the PV customers take advantage of the loan program. We assume the remaining 50% will pay cash, include their PV system as a part of a newly constructed home, or finance the system in some other way.

Option 2. A **revolving loan program** in which AB1890 funds are used to make <u>below market</u> interest rate loans which are packaged and sold in private security markets or public security markets with the assistance of the California Alternative Energy Financing Authority. This allows the AB 1890 funds to be recirculated to make new loans. This is a common technique, called securitization, that is used in mortgage loan and student loan markets. *A total of $24 million of AB 1890 funds would be required to pay for the cost of such a program*, calculated as follows. A securitization program provides approximately 3-to-1 leveraging of the base capital. Assuming a 50% participation rate in the loan program, $24 million of base capital is required to generate $75 million in loan principle.

In the time allotted to develop AB1890 proposals it was not possible to fully develop either option and determine which is the best. Based on our preliminary research, we chose the lower $24 million figure as the absolute minimum required to implement the low cost loan program and successfully carry out the commercialization plan. We urge the Commission to fully fund the financing program, and to specifically allocate the funds for photovoltaics because of the unique needs of distributed consumer-purchased systems.[6]

We also request that Staff's proposed requirement of a minimum 10% down payment for consumer financing be removed.[7] We believe it is premature to provide such a specific recommendation and that the state finance authorities and banking infrastructure should determine their own particular lending structures. Further, no such conditions have been placed on other finance mechanisms, such as Staff's proposed 11% allocation for new financed projects. We agree with the intent of Staff's proposed provision, however, and that mechanisms such as minimum down payments may be desirable in order to "invest the customer" in the PV system.

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[6] See page 17 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997. Staff states that *"the entire requested amount of $24 million of consumer financing need not come from AB 1890. Some portion of the AB 1890 emerging account funds could provide a seed fund".*

[7] See page 18 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997.

4. **<u>Do not make annual, project-specific allocations in the emerging category</u>**. Staff indicates that annual project-specific competitive funding allocations will be made within the emerging category.[8] This raises two issues that are in conflict with the PV proposal.

Issue 1. **Commercialization proposals for emerging technologies must be funded completely if they are to be effective**. The PV proposal lays out a specific six year program. The PV industry needs a firm commitment to make the manufacturing expansion investments needed to successfully bring down pricing levels, through economies of production and competitive markets, that can be sustained at the end of the AB 1890 funding period. The PV industry will not be induced or convinced to make the commitment to invest in new manufacturing facilities if the state is only willing to fund the proposed program one year at a time. Therefore, a lump sum of funding must be allocated and a commitment to a multi-year program established.

Issue 2. **Staff has proposed a project-specific allocation approach more appropriately geared to multi-MW central-station projects rather than thousands of consumer-side distributed systems**. Funding solicitations for individual projects is not the right vehicle for the PV commercialization plan. Infrastructure development and sustainability are important goals of the PV proposal, and in order to achieve these objectives, participation of a wide array of industry stakeholders must be accommodated. Accordingly, the allocation mechanism must be sufficiently accessible such that small retailer/contractor/marketers, as well as larger entities, can readily participate.

We recommend, therefore, that Staff change the language of their proposal to reflect the distinct needs of emerging distributed renewable technologies, and specifically the needs of photovoltaics. We urge Staff to call out the multi-year approach of PV commercialization where rebate amounts and program funding levels are known in advance.

We agree with Staff that control and adjustment mechanisms must be established to ensure that funds are spent judiciously, that industry targets are being made, and to fine tune the program as necessary.[9] We welcome the opportunity to work with Staff to design such controls.

5. **<u>The PV commercialization program has unique green marketing, consumer safeguard, and program administration needs</u>**. The PV coalition's proposal emphasizes distributed customer-sited applications, with a goal of installing 20,000 systems. Consequently, this program has very different green marketing, consumer safeguard, and program administration needs than do the multi-MW central station based renewable technologies that are the focal point of the Staff proposal. We believe that a separate pool of funding needs to be allocated for distributed technologies to cover marketing, consumer protection, and program administration. The PV coalition's proposal calls for $6 million for this purpose.

This seems to be in conflict with Staff's proposal that states that the consumer quality assurance and green marketing recommendations of the PV coalition proposal are met

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[8] See page 24 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997
[9] See page 24 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997

through the Staff's broad allocation to the consumer education and market research account.[10] While we urge Staff to recognize the unique needs of consumer-based distributed PV implementation, we would like to discuss with Staff ways to utilize existing CEC and state resources to lower our proposed funding requirements.

In closing, we applaud the progress made by the CEC to turn the spirit of AB 1890 into a working reality. We wish to underscore, however, that unlike other allocation proposals, the PV program represents a unique opportunity for California homeowners and businesses to *directly* participate in the growth of the renewable industry by locating distributed renewable facilities on their properties, no matter where they may be located. Further, the implementation of the AB 1890 program will be the driving force behind the creation and expansion of a sustainable PV industry and economic infrastructure that can successfully compete beyond the funding period. We urge the Commission to recognize these unique attributes of the PV proposal, and fully allocate AB 1890 resources commensurate with these key advantages.

[10] See page 17 of CEC Staff Draft "Policy Report on AB 1890 Renewables Funding", January 3, 1997